

Scale-Up: A World in Motion

Overview: AWIM provides science, technology, engineering and math education through inquiry based real world engineering challenges designed for primary, elementary and middle school students.

Program Summary

SAE International's A World In Motion® (AWIM) program is a teacher-administered program that brings science, technology, engineering and math (STEM) education to life in the classroom. The AWIM program provides age-appropriate multidisciplinary hands-on experiences for students. Each AWIM activity is benchmarked to national standards, and combines a comprehensive curriculum built around the AWIM Engineering Design Experience. This problem solving process allows students to work within a structure to solve a “challenge” to design, build, and test a prototype, then defend their design through a presentation.

Project Description/Objectives

- Engage K-8 school students in science, technology, engineering, and mathematics (STEM) subjects and careers through SAE International's proven and effective A World In Motion Program to increase student performance and interest in these areas.
- Provide Iowa educators with an education program that provides the opportunity to introduce students to STEM professionals as classroom volunteers for real world exposure to STEM careers.
- Increase students understanding and mastery of standards based concepts and skills including: team work and collaboration; experimentation, organizing/presenting data through tables and presentations as measured on a teacher pre and post participation survey.
- Improve teacher effectiveness through professional development which will enhance their understanding of the subject matter and delivery of the curriculum, increase their confidence for teaching in general and their comfort with physical science concepts in particular.
- Deliver a value driven program with proven, effective, and measurable results indicating students' improved performance in science, technology, engineering, and math (STEM) subjects.

Grade Levels: K-8

What is Provided by the Project

- Professional Development
- Teachers receive one day of professional development. PD will take place in each STEM Scale-Up Hub at central locations. Teachers will receive PD customized to primary, elementary or middle school levels.
- AWIM Curriculum & Classroom Materials. Participating teachers will receive AWIM kit-based learning material (each kit serves 24+/- students). AWIM kits include the full curriculum and materials required for program delivery.
- Sub Reimbursement. \$120 per teacher attending training will be reimbursed to the school
- Teacher Travel Reimbursement. \$50 to cover teacher travel to/from training location
- Ongoing Implementation Support & Resources

What is Required by the School or Local Education Agency (LEA) in Order to Implement This Program:

As a selected Service Provider, SAE International is not only providing curriculum/material kits on a cost basis to teachers choosing the AWIM program, but also provided a number “in-kind products and services” to support the success of the Scale-Up Program which included the following:

- Administrative support to LEAs (in-kind)
- SAE/Iowa STEM Scale-Up Customized Website to interface with LEAs (in-kind)
- SAE Staff Travel Funds (in-kind)
- An additional 25% in curriculum and classroom materials for LEAs that partnered with a “STEM Volunteer” to enrich the AWIM experience for participating teachers/students. (in-kind)

The following are the only requirements of the participating school or LEA:

- Attendance/Participation of Implementing Teachers in Professional Development
- Timely Completion of AWIM Experience in the Classroom
- Outcome Reporting (as deemed appropriate by Regional STEM Hub Manager)
- Agreement to Use/Implement Material Received Through Scale-Up Funding

Website to View Program and Standards Alignment: http://www.awim.org/pdf/standards_document.pdf

Program Video: <http://www.awim.org/videos/video-player-awim.htm>